

Questionnaire on sustainable entrepreneurship

Impact surveys for students and teachers

8.6.2022

Questionnaires for students and teachers

These were impact surveys for students and teachers. Surveys were answered twice, before and after the studies. First survey's results help teacher on planning the implementation of the Sustainability-driven Entrepreneurship study unit.

The results of the second survey will show the impact of the studies and help to develop the course implementation. The study deals with the competence related to sustainability-driven business and entrepreneurship.

| Surveys | Students | | Teachers | |
|--------------|------------|--------------|-----------|--------------|
| | Frequency | % | Frequency | % |
| Before pilot | 169 | 61 % | 25 | 63 % |
| After pilot | 106 | 39 % | 15 | 38 % |
| Total | 275 | 100 % | 40 | 100 % |



Summary

Students questionnaire (26 items)

- 1) sustainable entrepreneurship competence (8 items),
- 2) current abilities related to sustainable business development (4),
- 3) entrepreneurial intentions and antecedent (5)
- 4) attitudes towards entrepreneurship (9).

Teacher's questionnaire (12 items)

- 1) teaching entrepreneurial competence (9 items)
- 2) and teaching sustainable entrepreneurship competence (3).

36 % of students have attended an entrepreneurship related course or training before current studies.



1) Students: Sustainable entrepreneurship competence



Students: Sustainable entrepreneurship competence

| A list of things associated with sustainability-driven entrepreneurship. | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
|--|--------------|---------------------|-----|------|------------------|------|------|------|------|
| | | disagree completely | | | agree completely | | | | |
| I am able to analyse my strengths and competences in my own environment | Before pilot | 2 % | 0 % | 5 % | 18 % | 37 % | 28 % | 9 % | 5,1 |
| | After pilot | 1 % | 0 % | 8 % | 18 % | 32 % | 34 % | 8 % | 5,1 |
| I am able to present my competence that is relevant to business | Before pilot | 4 % | 4 % | 9 % | 27 % | 29 % | 19 % | 8 % | 4,6 |
| | After pilot | 1 % | 4 % | 2 % | 25 % | 35 % | 30 % | 4 % | 4,9 |
| I understand the limited nature of natural resources and the importance of their sustainable use at the national level in proportion to the global operating environment | Before pilot | 3 % | 3 % | 6 % | 22 % | 25 % | 27 % | 14 % | 5,0 |
| | After pilot | 0 % | 2 % | 4 % | 26 % | 21 % | 29 % | 18 % | 5,3 |
| I know the main objectives of ecological, financial, social and cultural sustainability in sustainable development | Before pilot | 3 % | 3 % | 14 % | 24 % | 30 % | 20 % | 8 % | 4,6 |
| | After pilot | 0 % | 2 % | 13 % | 21 % | 35 % | 22 % | 8 % | 4,8 |
| I can identify the different phases in the life cycle of a product | Before pilot | 3 % | 4 % | 12 % | 18 % | 30 % | 20 % | 14 % | 4,8 |
| | After pilot | 0 % | 2 % | 9 % | 23 % | 34 % | 21 % | 11 % | 5,0 |
| I am able to explain why a business idea is sustainable | Before pilot | 5 % | 3 % | 14 % | 24 % | 34 % | 14 % | 5 % | 4,4 |
| | After pilot | 2 % | 4 % | 9 % | 24 % | 35 % | 20 % | 7 % | 4,7 |
| I can create and assess sustainable business ideas and opportunities | Before pilot | 4 % | 4 % | 11 % | 28 % | 32 % | 14 % | 7 % | 4,5 |
| | After pilot | 2 % | 5 % | 16 % | 25 % | 25 % | 24 % | 5 % | 4,5 |
| I can present/pitch my sustainability-driven business ideas and opportunities | Before pilot | 4 % | 7 % | 13 % | 25 % | 33 % | 13 % | 6 % | 4,4 |
| | After pilot | 2 % | 6 % | 14 % | 24 % | 26 % | 20 % | 8 % | 4,6 |



2) Students: Current abilities related to sustainable business development



Students: Current abilities related to sustainable business development

| Students: Your own current abilities related to sustainable business development. | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
|---|--------------|------------|------|------|------|----------------|------|-----|------|
| | | no ability | | | | strong ability | | | |
| Different forms of entrepreneurship *) | Before pilot | 8 % | 11 % | 18 % | 25 % | 30 % | 5 % | 4 % | 3,9 |
| | After pilot | 3 % | 6 % | 16 % | 21 % | 37 % | 16 % | 2 % | 4,4 |
| Business models | Before pilot | 7 % | 9 % | 14 % | 25 % | 27 % | 12 % | 5 % | 4,1 |
| | After pilot | 3 % | 6 % | 15 % | 20 % | 30 % | 20 % | 7 % | 4,5 |
| Developing a business idea | Before pilot | 5 % | 5 % | 11 % | 25 % | 28 % | 19 % | 7 % | 4,5 |
| | After pilot | 2 % | 5 % | 8 % | 24 % | 27 % | 25 % | 9 % | 4,8 |
| Pitching effectively | Before pilot | 8 % | 12 % | 10 % | 24 % | 27 % | 12 % | 7 % | 4,2 |
| | After pilot | 3 % | 6 % | 14 % | 30 % | 22 % | 17 % | 9 % | 4,5 |

*) i.e. part-time, hybrid entrepreneurs, light entrepreneurs, intra entrepreneurs, social entrepreneurs



3) Students: Entrepreneurial intentions and antecedents



Students: Entrepreneurial intentions and antecedents

| If you think of your future career after graduation, to what extent do the following issues correspond to your own expectations and plans. | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
|--|--------------|---------------|------|------|------|------|------|-------------|------|
| | | very unlikely | | | | | | very likely | |
| How likely are you to continue your career employed by another (i.e. in salaried work) after graduation? | Before pilot | 5 % | 2 % | 7 % | 18 % | 24 % | 28 % | 16 % | 5,0 |
| | After pilot | 4 % | 4 % | 4 % | 12 % | 28 % | 30 % | 18 % | 5,2 |
| How likely are you to start your own business and work as an entrepreneur after graduation (or while still studying)? | Before pilot | 13 % | 12 % | 14 % | 21 % | 24 % | 9 % | 7 % | 3,9 |
| | After pilot | 9 % | 19 % | 13 % | 23 % | 21 % | 12 % | 3 % | 3,7 |
| How likely is it that you will be employed for most of your career by a company or public organization (without any connection to entrepreneurship)? | Before pilot | 6 % | 4 % | 14 % | 23 % | 28 % | 18 % | 8 % | 4,5 |
| | After pilot | 1 % | 4 % | 13 % | 26 % | 30 % | 12 % | 13 % | 4,7 |
| | | very slim | | | | | | very good | |
| If I established a business and started to work as an entrepreneur after graduation, my chance of success would be very slim ... very good | Before pilot | 5 % | 5 % | 12 % | 33 % | 24 % | 17 % | 4 % | 4,3 |
| | After pilot | 3 % | 5 % | 17 % | 30 % | 25 % | 18 % | 2 % | 4,3 |
| | | no intention | | | | | | very good | |
| How strong is your intention to embark on entrepreneurship at some point of your professional career? | Before pilot | 8 % | 8 % | 13 % | 22 % | 21 % | 17 % | 11 % | 4,3 |
| | After pilot | 6 % | 7 % | 15 % | 22 % | 23 % | 18 % | 10 % | 4,4 |



4) Students: Attitudes towards entrepreneurship



Students: Attitudes towards entrepreneurship

| Attitudes towards entrepreneurship | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
|------------------------------------|--------------|------------|------|------|------|------------|------|------|------|
| | | not at all | | | | completely | | | |
| Interesting | Before pilot | 5 % | 2 % | 7 % | 15 % | 25 % | 28 % | 18 % | 5,1 |
| | After pilot | 2 % | 3 % | 6 % | 17 % | 23 % | 31 % | 19 % | 5,2 |
| Esteemed | Before pilot | 4 % | 3 % | 8 % | 20 % | 35 % | 17 % | 14 % | 4,8 |
| | After pilot | 1 % | 2 % | 12 % | 25 % | 25 % | 25 % | 9 % | 4,8 |
| Dishonest | Before pilot | 29 % | 17 % | 14 % | 22 % | 11 % | 5 % | 1 % | 2,9 |
| | After pilot | 22 % | 24 % | 16 % | 25 % | 10 % | 3 % | 1 % | 2,9 |
| Worth pursuing | Before pilot | 3 % | 2 % | 12 % | 21 % | 30 % | 18 % | 14 % | 4,8 |
| | After pilot | 3 % | 3 % | 8 % | 29 % | 20 % | 22 % | 15 % | 4,9 |
| Boring | Before pilot | 22 % | 30 % | 15 % | 15 % | 9 % | 6 % | 4 % | 2,9 |
| | After pilot | 26 % | 26 % | 22 % | 9 % | 8 % | 4 % | 5 % | 2,8 |
| Fascinating | Before pilot | 4 % | 2 % | 5 % | 24 % | 27 % | 23 % | 15 % | 5,0 |
| | After pilot | 3 % | 3 % | 10 % | 24 % | 24 % | 19 % | 18 % | 4,9 |
| Despised | Before pilot | 27 % | 15 % | 17 % | 25 % | 10 % | 4 % | 2 % | 2,9 |
| | After pilot | 18 % | 25 % | 16 % | 25 % | 7 % | 6 % | 3 % | 3,1 |
| Good income level | Before pilot | 3 % | 5 % | 4 % | 30 % | 27 % | 20 % | 12 % | 4,8 |
| | After pilot | 1 % | 3 % | 7 % | 25 % | 26 % | 25 % | 14 % | 5,0 |
| Oppressive | Before pilot | 15 % | 12 % | 15 % | 28 % | 17 % | 8 % | 5 % | 3,6 |
| | After pilot | 14 % | 14 % | 19 % | 22 % | 12 % | 11 % | 8 % | 3,7 |



Teachers: Background Information



Teachers: Background information

| | |
|--|------|
| Do you have experience of working as an entrepreneur (previously or currently, included part-time)? | |
| Yes | 64% |
| No | 36% |
| Total | 100% |
| What is your approach in teaching entrepreneurship, choose the most appropriate option: | |
| I teach courses directly related to entrepreneurship | 40% |
| I teach other courses but I apply aspects of entrepreneurship in my teaching | 44% |
| I don't teach entrepreneurship at all | 16% |
| Total | 100% |
| What is your approach in teaching sustainability, choose the most appropriate option: | |
| I teach courses directly related to sustainability | 12% |
| I teach other courses but I apply aspects of sustainability in my teaching | 68% |
| I don't teach sustainability at all | 20% |
| Total | 100% |



1) Teachers: Teaching entrepreneurship competence



Teachers: Teaching entrepreneurship competence

| Teachers: Please assess your own current abilities in regard to teaching the following aspects of entrepreneurial competence on a scale: I have no ability 1 2 3 4 5 6 7 strong ability. | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
|--|--------------|------------|-----|-----|----------------|-----|-----|-----|------|
| | | no ability | | | strong ability | | | | |
| Teach students to identify their strengths, competences and moral compass | Before pilot | 0% | 4% | 8% | 24% | 16% | 36% | 12% | 5,1 |
| | After pilot | 7% | 7% | 0% | 13% | 33% | 33% | 7% | 4,9 |
| Teach students to identify relevant competence in business | Before pilot | 0% | 8% | 12% | 28% | 20% | 16% | 16% | 4,7 |
| | After pilot | 0% | 7% | 7% | 27% | 27% | 20% | 13% | 4,9 |
| Teach students to understand the limited nature of natural resources and the importance of their sustainable use at the national level in proportion to the | Before pilot | 8% | 0% | 8% | 24% | 36% | 16% | 8% | 4,6 |
| | After pilot | 7% | 0% | 13% | 27% | 13% | 27% | 13% | 4,7 |
| Teach students to understand main objectives of ecological, financial, social and cultural sustainability in sustainable development | Before pilot | 4% | 8% | 12% | 16% | 28% | 24% | 8% | 4,6 |
| | After pilot | 0% | 7% | 13% | 20% | 20% | 33% | 7% | 4,8 |
| Teach students to identify the different phases in the life cycle of a product | Before pilot | 0% | 20% | 12% | 12% | 40% | 12% | 4% | 4,2 |
| | After pilot | 0% | 7% | 13% | 13% | 27% | 27% | 13% | 4,9 |
| Teach students to explain why a business idea is sustainable | Before pilot | 4% | 4% | 8% | 32% | 24% | 20% | 8% | 4,6 |
| | After pilot | 0% | 0% | 13% | 13% | 27% | 33% | 13% | 5,2 |
| Teach students to create and assess sustainable business ideas and opportunities | Before pilot | 0% | 4% | 16% | 36% | 20% | 20% | 4% | 4,5 |
| | After pilot | 0% | 0% | 13% | 20% | 20% | 33% | 13% | 5,1 |
| Teach students to present/pitch their sustainability-driven business ideas and opportunities | Before pilot | 4% | 4% | 8% | 12% | 20% | 40% | 12% | 5,1 |
| | After pilot | 0% | 7% | 7% | 7% | 27% | 40% | 13% | 5,3 |
| Teach students how to team-up, collaborate and network | Before pilot | 0% | 0% | 4% | 8% | 28% | 40% | 20% | 5,6 |
| | After pilot | 0% | 0% | 0% | 20% | 27% | 27% | 27% | 5,6 |



2) Teachers: Teaching sustainable entrepreneurship competence



Teachers: Teaching sustainable entrepreneurship competence

| Teachers: Please assess your own current abilities in regard to teaching these competences to students on a scale: I have no ability 1 2 3 4 5 6 7 strong ability. | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Mean |
|--|--------------|------------|----|----|----------------|-----|-----|-----|------|
| | | no ability | | | strong ability | | | | |
| Teach students how to find information about sustainability from different sources. | Before pilot | 8% | 0% | 0% | 16% | 44% | 28% | 4% | 4,9 |
| | After pilot | 0% | 7% | 7% | 13% | 20% | 33% | 20% | 5,3 |
| Teach students how to construct and consider different directions for sustainability in the future. | Before pilot | 8% | 4% | 8% | 28% | 36% | 12% | 4% | 4,3 |
| | After pilot | 0% | 0% | 7% | 20% | 27% | 27% | 20% | 5,3 |
| Teach students how to identify opportunities for sustainable development. | Before pilot | 8% | 8% | 4% | 20% | 36% | 16% | 8% | 4,5 |
| | After pilot | 0% | 7% | 0% | 0% | 53% | 13% | 27% | 5,5 |



Conclusions



Conclusions

- Students' evaluations of things associated with sustainability-driven entrepreneurship (8 items) were at good level already before pilot assessed on scale from 1 to 7.
- ***After pilot course students' evaluations of sustainability-driven entrepreneurship were even more positive.*** Almost all mean values of asked items were better after pilot than before pilot course.
- Students had not very high intentions to entrepreneurship before pilot and their opinions were almost same after pilot course. Attitudes towards entrepreneurship were very positive although entrepreneurial intentions were not so high. Generally starting his/her own business is more common after few years of graduation.
- Teachers have quite good abilities to teach different aspects of entrepreneurial competence. All mean values (9 items) were before and after pilot course nearly five or more on scale 1-7. Teachers' experiences were positive, and they felt to have even better abilities after pilot. ***Teachers' abilities to teach sustainable entrepreneurship were before pilot at good level (mean values 4,3-4,9) but after pilot course abilities were much better – mean values 5,3 – 5,5. Eventhought teacher's ability to teach holistically the sustainability didn't change that much during the pilot (4,6-4,8) , however teacher's abilities to teach circular economy were much better after the pilot (mean values 4,2-4,9)***

